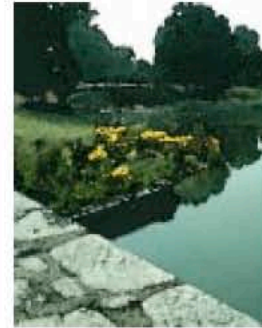
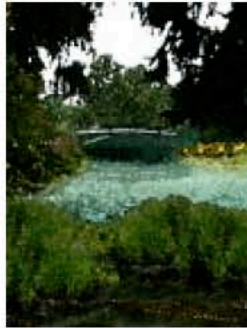


C I T Y   O F   S A I N T   L O U I S ,   M I S S O U R I



# C A R O N D E L E T   P A R K

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T O   B E   A D O P T E D   B Y   T H E   S A I N T   L O U I S   C I T Y   P L A N N I N G   C O M M I S S I O N

## THE MASTER PLAN DESIGN TEAM

---

### THE CITY OF ST. LOUIS

Mayor Francis Slay	<i>City of St. Louis</i>
Gary Bess	<i>Director of Parks, Recreation &amp; Forestry</i>
Alderman Villa	<i>Board of Aldermen - Ward 11</i>
Alderman Wessels	<i>Board of Aldermen - Ward 13</i>

### THE MASTER PLAN COMMITTEE

#### C O - C H A I R S

Dan Skillman	<i>Parks Commissioner</i>
Tim Bolt	<i>Citizen Representative</i>

#### M E M B E R S

John Bock	<i>Boulevard Heights Neighborhood</i>
Ron Bolte	<i>Carondelet Historical Society</i>
Victoria Chechik	<i>Holly Hills Neighborhood</i>
Pat Eby	<i>Carondelet Betterment Foundation</i>
Ed Gaertner	<i>Horseshoe Association</i>
Chief Sherman George	<i>St. Louis Fire Department</i>
Dan Gruen	<i>Community Education</i>
Mark Hacker	<i>Athletic Representative</i>
Joe Holway	<i>Lyle House</i>
Jonas Hubbard	<i>Board of Public Service</i>
Debra McMorris	<i>Bellerive Neighborhood</i>
Karen Pecaut	<i>Department of Parks, Recreation &amp; Forestry</i>
Dan Schulze	<i>YMCA</i>
Michael Sestric	<i>Arborist</i>
Tony Sestric	<i>Friends of Carondelet Park</i>
	<i>represented by: Megan Everding</i>
Rollin Stanley	<i>Planning &amp; Urban Design Agency</i>
	<i>represented by: Don Roe &amp; Daffney Moore</i>
Alderman Villa	<i>Board of Aldermen</i>
Alderman Wessels	<i>Board of Aldermen</i>

### THE MASTER PLAN DESIGN TEAM

<b>H3 Studio, Inc.</b>	<i>Design &amp; Planning</i>
John Hoal	<i>Principal-in-Charge</i>
Mara Perry	<i>Project Manager</i>
Laura Lyon	
Emily Lammert	
Peter Miller	
Megan O'Neill	
Harriet Grindel	<i>Intern</i>
Freddie Dickinson	<i>Intern</i>
<b>CH2M Hill</b>	<i>Engineering &amp; Cost Estimation</i>
Joe Madlinger	<i>Principal</i>
Elise Ibendhal	
Andrea Schnapp	<i>Arborist</i>

C A R O N D E L E T   P A R K  
M A S T E R   P L A N

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*SUPPORTING DOCUMENT  
TECHNICAL MEMORANDUM  
Available at the Department of Parks, Recreation and Forestry*

## INTRODUCTION



Historic image of park gate



Aerial looking north at the park



The fountain at Boathouse Lake

Carondelet Park is located in the southern section of the City of St. Louis along Highway 55 and near the River des Peres. It is the focal point of five neighborhoods and the major park for the approximately thirty-six thousand people who live within a 10-minute driving distance. It was established in 1874 and at 180 acres is the third largest park in the City of St. Louis' park system. Within the City of St. Louis' park system, Carondelet Park is unique for its Karst landscape, rolling hills, picturesque landscape, and historic boathouse, bridges and pavilions.

For the last ten years, Carondelet Park has been showing the initial signs of deterioration. Although the Parks Department has recently completed important infrastructure improvements, both the City of St. Louis and the adjacent neighborhoods expressed a desire to complete a comprehensive master plan for the restoration of the park. In February 2002, the City of St. Louis began the process of developing the Carondelet Park Master Plan with the intent to conserve and enhance the beauty and quality of the park while satisfying the needs of all park users. The designers and community recognized the importance of viewing the park as an integrated ecosystem with a wide range of purposes and needs, in which nature and humans interact. As a result, the plan outlines a long-range vision for the restoration of the park's picturesque landscape and aquatic ecosystem while retaining a balanced approach to the active and passive recreational needs of the park's users.

The plan also outlines a series of short-term actions to ensure the immediate needs are addressed, and suggests the establishment of an Implementation Advisory Committee to continue the community input in the restoration of Carondelet Park. Overall the plan suggests an achievable, balanced and holistic approach to the park's renovation.



Master Plan



## DEVELOPMENT OF THE MASTER PLAN

Development of the Master Plan followed a logical and carefully pre-determined process starting with the identification of needs, then a series of goals and principles to guide the design of the park. The end result was a set of specific recommendations on changes, modifications and improvements for the park. At each stage, input from the community was solicited through public workshops. A total of four public workshops were held during the 12 month planning process. The planning sequence is summarized below:

- 1 - An analysis of the existing conditions of each of the park systems (context, water, landscape, unprogrammed passive recreation, active space, facilities, and access, circulation and parking) to provide a baseline of information of the park's infrastructure and needs
- 2 - An analysis of the historical evolution of the park  
*Public Workshop: Identification of Issues*
- 3 - A vision statement that describes the role, character and importance of Carondelet Park
- 4 - A set of goals that, when achieved, will ensure a diverse, multi-purpose, and environmentally sound park that is responsive to the needs and desires of its users.
- 5 - A series of design principles, which provide greater guidance on the site specific manner in which to realize the vision and goals  
*Public Workshop: Goals & Principles*
- 6 - Specific system-by-system recommendations for improvements to Carondelet Park that are integrated into geographically specific proposals  
*Public Workshop: Schematic Design*
- 7 - An Implementation Strategy including governance, management, maintenance, and funding recommendations  
*Public Workshop: Draft Master Plan*

This Master Plan addresses all aspects of the park and, when fully implemented, will ensure a park experience that is diverse, unique, and inviting for all the residents of the adjoining neighborhoods, as well as the entire City of St. Louis.

## ORGANIZATION & SCOPE OF THE PLAN

The Master Plan first provides a profile of the park that summarizes how the park evolved. After an in-depth analysis of Carondelet Park (included in a separate appendix), this master plan addresses the seven systems of the park, ensuring a unique, ecologically sustainable park when fully implemented. All these systems are designed to build upon the picturesque quality of the landscape. Finally, attention is turned to the implementation of the vision by outlining a series of governance, management, maintenance, and funding proposals.



Public Workshop discussion



Media at a Public Workshop



Public Workshop break-out session



Public Workshop break-out session

## PARK PROFILE



1876 Land Plat



1878 Proposed Plan



Historic image of park improvements



Mayor's Fishing Fair at Boathouse Lake



Soccer in the park 1922



Ice-skating on Boathouse Lake

## HISTORY

Carondelet Park has a compelling and interesting history as a scenic picturesque park located at the center of many south city neighborhoods in the city of St. Louis. Residents of the far south side worked together diligently during a campaign for the creation of Forest Park in the early 1870's to acquire the land for the park. When provisions for parks in the north and south of the city were added to the legislation for the establishment Forest Park, the combined Park Proposition readily won the approval of the voters. In the end the land for Carondelet Park was purchased by the city of St. Louis in 1874 for \$143,000. The parcel of land that is now the park, was a part of the old Carondelet Common Fields of the City of Carondelet. Amos Curtis Lyle, a pioneer settler in Carondelet, owned a portion of this land. Later his grandson, Alexander Lacey Lyle, inherited it. This family is historically significant to the park in that Alexander Lyle erected an eight-room home in 1842 that still stands today, named the Lyle House.

Proposals for improvements and further development occurred sporadically throughout Carondelet Park's history. Many aspects of the formal proposals were never actualized but some of the changes made over the years are now important features in the park. The road system, for example, has not changed significantly since 1890 and today can easily accommodate the increase in vehicular use. The sinkholes, emphasized on plans dating back to 1878, offer opportunities for unique and site specific designs and are in much need of attention. Horseshoe Lake is the result of joining nine of the sinkholes in 1913 and is now a prominent feature in the park enjoyed by many visitors. The 1907 schematic plan shows a proposal to expand the park to the north and create a boulevard system. Although the park was not expanded, the park was joined to the boulevard system via what is now known as Grand Boulevard and Holly Hills Boulevard.

During the first part of the 20<sup>th</sup> century there was further interest in expanding the existing facilities in the park to create a more comfortable park experience. Historic amenities such as the Lyle House, the Music Pavilion, the Old Stable, and the Music Stand continue to bring the surrounding population to Carondelet Park where they can experience the park's history first hand through architecture. Currently, there is a need to improve upon what history has left. The primary structures in the park were built prior to the 1920's with the exception of the comfort stations. Even though these facilities have been upgraded or repaired over the years, at this time they are in fair to poor condition. These facilities have the potential to bring people to the park and provide an arena for interaction. Carondelet Park has never ceased to be a center for social gathering and community involvement and will continue to play this role in the future.



## PARK PROFILE

Carondelet Park is the only major park in the southeast section of the City of St. Louis. Covering a total of 180 acres, Carondelet Park is approximately 9/10<sup>th</sup> of a mile long and 1/3<sup>rd</sup> of a mile wide. The park is used as a neighborhood park as well as being an important park in the City of St. Louis' Park System. As a neighborhood park, 10,000 residents are within a fifteen-minute walk of the park allowing for easy access to the amenities within. With 36,000 residents living in neighborhoods within one mile of the park, Carondelet Park has the potential to be a major community gathering space. An excellent example of the park's potential is the Summer Concert Series at the historic Music Stand. The park is also located within two aldermanic wards, the 11<sup>th</sup> and the 13<sup>th</sup> containing over 25,000 residents.

Currently, the park has a lot to offer visitors from athletic fields, the picturesque landscape and fishing holes, to visually appealing historic architecture. The existing features and amenities have unique qualities that are only found in Carondelet Park. The undulating Karst landforms in the park defines the scenic and picturesque character of Carondelet Park. The topography is a crucial feature in determining views and vistas in the landscape as well as providing a basis for the layout of the street system. The roads wind along the ridge-lines throughout the park providing magnificent views and vistas of the landscape, water features and pavilions. Visitors enjoy concerts at the Music Stand or join family and friends for a picnic on a grassy hillside. Historically, major events brought people to the park such as sporting events or an annual school picnic. Today, with the help of a cohesive plan, this energy can return to the park bringing back an essential vitality. Organization of the individual elements within the park will accentuate the strong social history inherent to Carondelet Park.



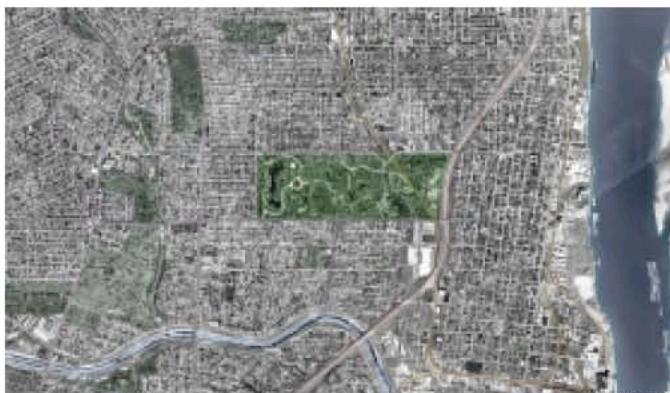
Boathouse Lake 1907



Boating on the lake 1936



Bike race next to white wall 1979



Aerial photo

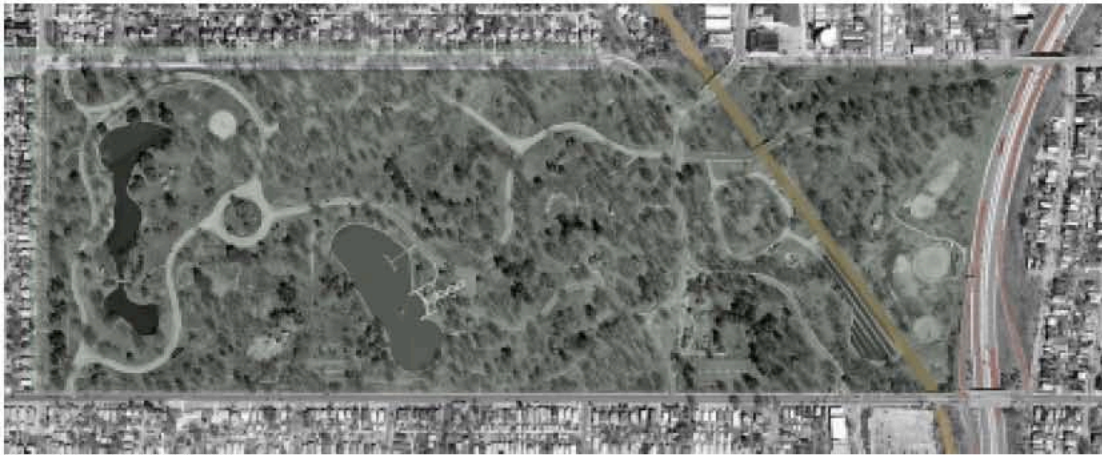


Grotto in Carondelet Park 1910

## VISION

### THE VISION FOR CARONDELET PARK'S FUTURE

*Carondelet Park is the surrounding neighborhoods' central gathering place - a place to celebrate our diversity and define our community. It is the home of unique architectural and natural spaces, events, and activities that reflect our local interests, cultures, and history, as well as, the place to experience our relationship with the beauty and wonder of nature. As the focal point of the surrounding neighborhoods it is the most important civic place for which we have shared responsibility.*



Aerial Photo - existing conditions



Master Plan



## GOALS

The following goals when accomplished should ensure a diverse, multi-purpose, environmentally sound future for the park and its users.

### *CARONDELET PARK WILL BE ...*

- The central gathering place for residents of the surrounding neighborhoods, city and county.
- The home of many of the surrounding neighborhoods' special events.
- Well-maintained and safe for all park users.
- An environmentally safe recreation area, posing no hazard to the health and safety of current and future park users.

### *CARONDELET PARK WILL PROVIDE ...*

- For a diversity of open space, cultural, and recreational needs and activities.
- For the preservation and maintenance of its natural resources, environment and wildlife habitat to ensure a sustainable, ecologically sound natural system.
- A unique park experience that is safe and enjoyable access for all park users.
- Educational and volunteer programs, events, and outreach activities.
- A diversity of multi-cultural events that celebrates local culture and history.
- Access and facilities that are in compliance with the Americans with Disabilities Act (ADA).

*CARONDELET PARK'S* natural beauty, scenic value, and historic facilities will be the basis for the enjoyment of the park, regardless of future changes in types and levels of park activities and park users.

### *CARONDELET PARK WILL BE ...*

preserved as an affordable experience for all park users

### *CARONDELET PARK WILL BE ...*

well-managed, governed, and adequately financed, based upon an open and inclusive public/private process.

*THE PRINCIPLES OF STEWARDSHIP, PARTNERSHIP, & SHARED RESPONSIBILITY* among all Carondelet entities and surrounding neighborhoods will govern the implementation of the plan.



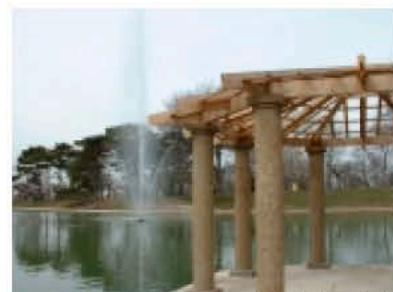
Loughborough playground



Easter Egg Hunt



Summer Concert at the Music Stand



Pagoda at Boathouse Lake

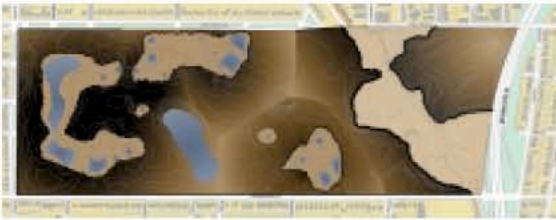
## DESIGN PRINCIPLES



Based upon the analysis of the existing conditions of Carondelet Park, the planners developed nine design principles:

1

*Improve the integration and connection of Carondelet Park to adjacent neighborhoods, the River Des Peres Greenway and the Mississippi River, Grant's Trail, and surrounding landmarks.*



2

*Emphasize the Karst landform and Glaize Creek Corridor to define the experience, use and character of the park.*



3

*Utilize the naturally occurring sinkholes to create a diversity of aquatic habitats and consider linking a number of the sinkholes to improve drainage and water quality.*



4

*Retain the passive nature of the open space and create a diverse, well-maintained, naturally sustaining, and ecologically responsive landscape system.*



5

*Develop a landscape plan that builds upon the picturesque character of the park and provide additional park amenities such as picnic facilities, adventure playgrounds, and benches.*



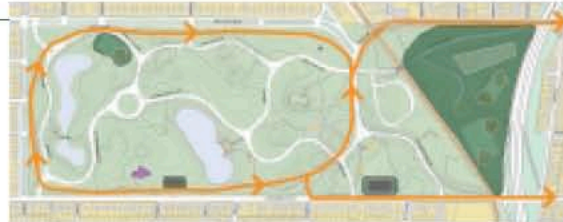
6

*Allow necessary modifications to the road system and develop a traffic management system to control or divert cut-through traffic as well as improving connections to the neighborhoods.*



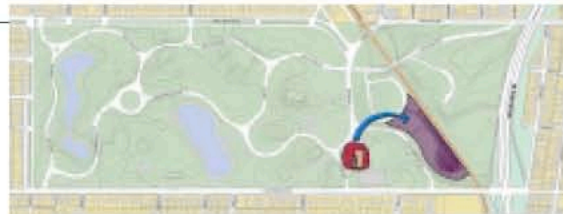
7

*Retain the majority of the existing and any proposed active recreational amenities towards the eastern end of the park and create a park-wide recreational biking and walking path system.*



8

*Relocate the park maintenance facility from the historic stables to the area adjacent to the rail lines and mulch piles in order to reuse the historic stables as a community venue.*



9

*Preserve, restore and re-use existing historically significant landmarks and landscape features.*



#### COMPOSITE



## DESIGN RECOMMENDATIONS

### CONTEXT



Entrance to Carondelet Park



Aerial looking southwest



Aerial looking south



Grand Avenue bridge entrance to the park



Metro bus stop adjacent to the park

### OVERVIEW

Carondelet Park is unique in the way that it serves the adjacent neighborhoods. Nearly ten thousand people reside within a fifteen-minute walking distance to the park. Almost 170,000 people, 132,000 city residents and 38,000 county residents are located within a three-mile radius of the park. As such, Carondelet Park accommodates a wide range of neighborhood and city-wide recreational amenities and uses. As part of the River des Peres watershed, Carondelet Park offers the potential to be re-integrated into the local and regional natural systems and emerging greenway system.

### SUMMARY OF EXISTING CONDITIONS

As a city park, Carondelet Park is the third largest park in the City's parks system. Carondelet Park is well served by the regional and city wide transportation system. It is connected to the city arterial road system by its surrounding boulevards – Holly Hills, Loughborough, Leona, Gravois, Kingshighway and Grand. These boulevards also provide links to the surrounding neighborhoods. Regional access to the park is provided by Interstate 55 on the eastern edge of the park. The Bi-State bus service has two bus lines and three bus stops within three blocks of the park. Options for the future expansion of MetroLink include a connection to Carondelet Park along Interstate 55 or through the park along the existing rail corridor.

As a political entity, Carondelet Park is located within two aldermanic wards, the 11th and the 13<sup>th</sup> and is bounded by the 12<sup>th</sup> ward. Carondelet Park is surrounded by over 36,000 residents in five neighborhoods, these being: Bevo Mill, Holly Hills, Carondelet, Patch and Boulevard Heights neighborhoods. The population in three of the neighborhoods (Holly Hills, Patch and Boulevard Heights) has decreased by approximately twelve percent from the 1990 to the 2000 census. The other two neighborhood populations (Bevo Mill and Carondelet) only decreased by one percent. Approximately twenty-six percent of those living around the park are under the age of 19 years, fifty-five percent are aged 20 to 59 years and nineteen percent are older than 60. The average household income in the neighborhoods ranges from \$28,027 to \$44,465.

A number of schools and other institutions are located in the area surrounding the park, including six public and private schools, the YMCA, the Carondelet Blow Community Education Center and the Windsor Community Center. The area around the park is primarily residential with some local commercial uses. Industrial uses are located closer to the Mississippi riverfront and along the rail line corridor south and east of the park.



## DESIGN RECOMMENDATIONS

- Continue to anchor south city neighborhoods and provide the area's central gathering place.
- Increase connectivity and mutual programming opportunities with the surrounding assets, such as schools, the YMCA, etc.
- Increase the number of community venues and facilities that appeal to the diverse makeup of surrounding neighborhoods and residents.
- Increase connectivity to the remainder of the City of St. Louis Park System and the growing metropolitan greenway system.
- Provide legible connections and safe links to and from surrounding institutions, schools, community centers, and local pocket parks.
- Create safer pedestrian access for all users of the park.
- Link Carondelet Park to other parks, trails and open spaces including the River Des Peres Greenway, Grants Trail, and the Katy Trail.
- Create a trail connection to the River Des Peres greenway via Field Avenue, as well as provide a well-marked pedestrian entry into the park off Loughborough Avenue near the Music Stand and Boathouse area.
- Create pedestrian friendly, welcoming entrances on the perimeter of the park with amenities such as signage and seating at important locations.
- Rely upon the adjacent historic boulevards and major thoroughfares to increase the connectivity to the City of St. Louis Park System.
- Incorporate the landscaped boulevards on Leona Street and Holly Hills Boulevard into the general landscape design of the park.



Aerial looking north



Holly Hills Boulevard



Aerial looking northeast



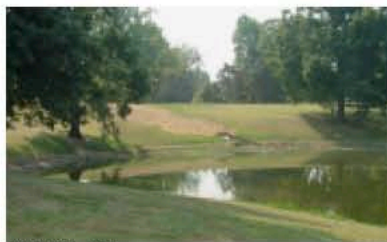
Neighborhood Connections

## DESIGN RECOMMENDATIONS

### 2. WATER



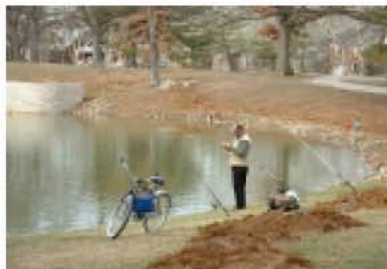
Boathouse Lake 1922



Horseshoe Lake



Standing water adjacent to the ball fields



Fishing on Horseshoe Lake



Existing Duck Island at Boathouse Lake

#### OVERVIEW

Water has always been an important and defining feature of Carondelet Park. The Glaize Creek area as well as Horseshoe Lake and Boathouse Lake are the major water features. These major features need to be significantly improved. Per a historic plan, Horseshoe Lake will be expanded to integrate a number of existing adjacent wetlands while fishing will remain the predominant use. Boathouse Lake should include additional programming other than fishing and have naturalized lake edges. The Glaize Creek area, a flood plain, needs improved drainage, wetlands and habitat.

Due to the Karst landform, sinkholes play an important role as a foundation for the spatial and aesthetic character of the park with its undulating slopes that enhance the picturesque quality and experience of the landscape. The master plan recognizes and builds upon the value and importance of the ecological potential of the park's Karst landform and resultant water features. Many sinkholes that currently have standing water need to be replaced with functional wetlands that will improve both the habitat and water quality as well as providing additional drainage in the park. These sinkholes improved as wetlands will enhance the park's character and beauty.

Thus, the Master Plan includes a water features plan that rejuvenates existing water features and further develops and enhances seasonal water retention areas into wetlands. By addressing key issues of the natural retention of water and where it inappropriately occurs, the plan improves the water quality, overall park drainage and habitat as well as the overall aesthetic character of the park.

#### SUMMARY OF EXISTING CONDITIONS

There are three major problems regarding the water features and drainage in the park. The first is the stagnant water within sixteen of the twenty existing sinkholes as well as in Horseshoe Lake and Boathouse Lake. The City's Water Division currently provides water to Horseshoe Lake and Boathouse Lake in order that they remain filled. Improved drainage, number of water inputs, aeration and water circulation in these lakes as well as more vegetation along the banks will significantly improve the water quality. Similarly, the master plan proposes to link a number of sinkholes and supply them with the necessary water flow in order to overcome the stagnant water problem. Those sinkholes that cannot be supplied with water or drained will be filled.



The second problem is the soil erosion caused by broken catch basins, exposed pipes, and areas of standing water. More than a dozen areas throughout the park have standing water during periods of dry weather. The current vegetation in the park is primarily turf. Erosion problems arise, particularly on the steep banks, as a result of the turf and turf maintenance practices. The vegetation that once absorbed some of the water run-off has been removed causing water to rapidly run downhill and continue to erode the steep banks.

The final water problem in the park is associated with the Glaize Creek area of the park adjacent to the railroad tracks, which is part of a flood plain that connects to the River Des Peres. The flood plain expands to the south through industrial areas. Excess water is drained into the River Des Peres and then to the Mississippi River. The last time serious flooding occurred in this area was during the 1993 flood.

## DESIGN RECOMMENDATIONS

### OBJECTIVE:

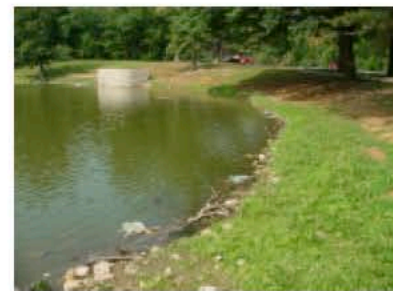
Build upon and expand the existing water features to improve the water quality, overall park drainage and habitat as well as the overall aesthetic character of the park. There are three major areas of improvement to the water features. First, create new water features that connect to Horseshoe Lake using existing sinkholes and erosion areas. Second, expand the island and develop the water edge of Boathouse Lake and finally, develop a series of wetlands from existing sinkholes and depressions.



Water supply at Horseshoe Lake



Boathouse Lake



Edge of Horseshoe Lake



Water Features



Horseshoe Lake before

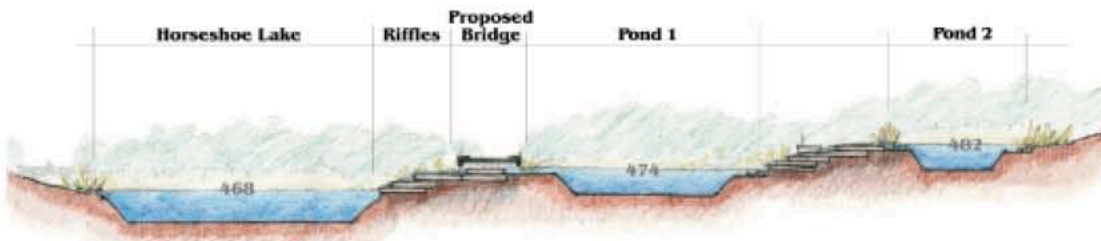


Horseshoe Lake after

#### SITE SPECIFIC RECOMMENDATIONS: HORSESHOE LAKE, PONDS, & RIFFLES

Expand the existing Horseshoe Lake at the southern end to integrate a number of existing sinkholes that have drainage and soil erosion problems. This expanded area of Horseshoe Lake includes two ponds developed from existing sinkholes called Horseshoe Ponds, as well as a series of pools and riffles developed along an existing line of erosion, called Horseshoe Riffles. The new Horseshoe Pond, Pool and Riffle edges will be developed with aquatic and riparian plantings to provide inaccessible edges for safety. Horseshoe Lake will be improved with a naturalized stone and planted water edge that accommodates fishing as well as two pebble beaches.

- Shape the new Horseshoe ponds, pools and riffles in response to the existing landform, sinkholes and areas of erosion.
- Provide a new water source north of the new Horseshoe Ponds. Water to flow by gravity through the various ponds and pools into Horseshoe Lake.
- Increase ecological quality and alleviate drainage and overflow problems in the lower pools by holding and controlling waters in the upper pools.
- Design and manage lakes and ponds to act as retention ponds in times of flooding.
- Improve the landscape quality and retain wildlife diversity at all times.
- Utilize natural stone in the Horseshoe Lake ponds, pools and riffles.
- Regulate the water level and flow of water throughout the ponds and pools with the design of the naturalized stone riffles.
- Direct surface runoff from Circle Drive and other adjacent roads to flow into the new pools and ponds.
- Design a small pedestrian footbridge that connects to the recreational path between the Horseshoe Ponds near the Loughborough playground.
- Design a small pedestrian footbridge across the Horseshoe Riffles.
- Provide a vehicular bridge on Loughborough Drive connecting the park roadway over the connection between the southern end of Horseshoe Lake and the Horseshoe Ponds.



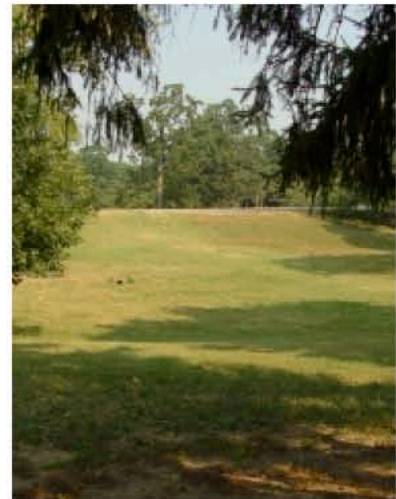
Section through Horseshoe Lake and Horseshoe Ponds



- Provide natural grass and stone edges at Horseshoe Lake to invite fishing and other passive recreational opportunities.
- Treat the edges of the new Horseshoe Ponds and Horseshoe Riffles near the Loughborough playground as inaccessible edges with numerous dense plantings to increase safety for the younger users of that area. Preserve the visual and audible appeal of the water but limit access to designated areas.
- Provide additional seating near the Loughborough playground and adjacent path system that takes advantage of the view to the Horseshoe Ponds and Horseshoe Pools.
- Provide a handicap accessible fishing platform along the northwestern end of Horseshoe Lake and connect it to the path system.
- Create a structured park trail where there is currently erosion and a pedestrian desire line, along the western slope of Horseshoe Lake.
- Replant existing turf areas on steeply sloped banks adjacent to the water features with native riparian and meadow planting.
- Provide additional park benches throughout the area.



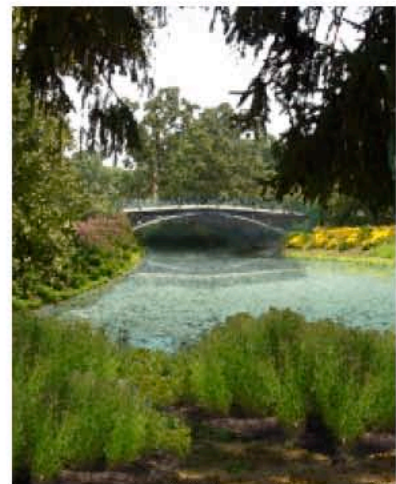
Example of naturalized edge



Sinkhole area before



Plan for Horseshoe Lake, Ponds, and Riffles



Sinkhole area with new pond after



#### SITE SPECIFIC RECOMMENDATIONS: BOATHOUSE LAKE & BOATHOUSE ISLAND

The Master Plan proposes further development of the existing lake including adding aquatic plantings along the water edge. The existing duck island in Boathouse Lake will be expanded and landscaped into a new island called Boathouse Island.



Aerial of Boathouse Lake

- Maintain the existing formal paved edge at Boathouse Lake.
- Expand and landscape island on Boathouse Lake to promote naturalized habitat for bird and aquatic species. Construct the island with an irregular configuration to create more underwater fish habitats.
- Consider terracing on the steep banks to the north of Boathouse Lake with plantings that conceal the terraces or soften the steep slopes through grading the banks.
- Renovate the existing access route from Loughborough Drive to Boathouse Lake.
- Improve the flow and density of water of the fountains to improve aeration of the water.
- Add aquatic plantings in areas shown on plan to soften edge of lake and improve water quality.



Fishing platform in Boathouse Lake



Northern edge of Boathouse Lake



Plan of Boathouse Lake and Island



## SITE SPECIFIC RECOMMENDATIONS: SINKHOLES & WETLANDS

The Master Plan proposes development of a series of wetlands from existing sinkholes as well as the filling or re-grading of sinkholes and depressions. Five groupings of wetlands will be developed: White Wall, Livingston, Holly Hills, Loughborough & Glaize Creek.

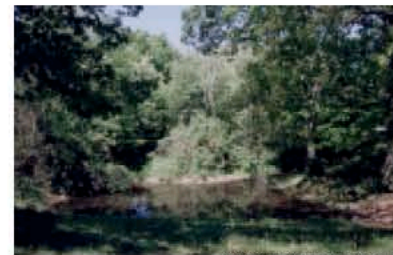
- Drain water from mulch/new maintenance area into city storm drain.
- Include in the proposed maintenance relocation plan, necessary modifications to the storm water drain for run-off from the employee parking lot and maintenance vehicle parking lot.
- Drain water from sinkhole #1, depression to be filled and graded to allow for drainage under Holly Hills Drive to sinkhole #8.
- Drain water from sinkhole #2, depression to be filled and graded towards sinkhole #3. Connect sinkholes #2 and 3, and link to sinkhole #9 in order to create a wetland. Drain with existing pump and add new city water supply.
- Drain water from sinkhole #4, depression to be filled and graded to sinkhole #5. Connect sinkholes #4 and 5 to create a wetland.
- Connect sinkholes #6 and 7 through grading to sinkhole #8 to create a wetland.
- Grade sinkhole #10 towards Boathouse Lake to remove standing water.
- Connect sinkholes #11, 12, and 13 to create a series of pools and ponds that flow into Horseshoe Lake.
- Connect sinkholes #14, 15, and 16 with other depressions in the area to form a wetland. Add new city water supply.
- Create a wetland area in sinkholes #17, 18, and 20.
- Create a small, landscaped pond from sinkhole #19 in front of Lyle House and the Old Stable
- Fill depressions along the Leona side of the park.
- Fill depressions near the bear pit area.
- Fill depressions at the southeastern corner of the park.
- Fill depressions on the Loughborough Avenue side of the park.



Example of wetlands



Example of grasses



Existing stagnant sinkhole



Sinkhole and Wetlands

## DESIGN RECOMMENDATIONS

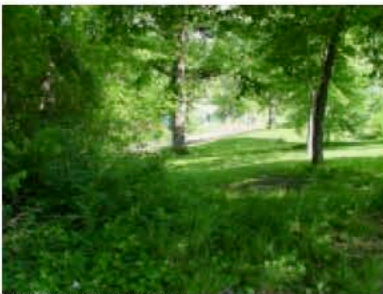
### LANDSCAPE



Historic image of maintenance in the park



Current maintenance practices



Dense area of undergrowth



View between the tree lines

#### OVERVIEW

The scenic quality of the landscape of Carondelet Park is determined to a large extent by the unique Karst landform and gently rolling hills. These landforms informed the placement of the roads along the ridge lines and as a result, the views down and across the landscape. These landforms include: the flood plain – formerly Glaize Creek; the sloping hillside coming up from the lowland of the flood plain and now the rail corridor; the rolling uplands area surrounding Boathouse Lakes, the high point of the formal circle; the sinkholes that were joined to form Horseshoe Lake; and wooded valley areas surrounding the sinkholes. These landforms were then accentuated in the choice of the picturesque design character of the landscape.

Thus, in developing the landscape design for the park, it is important to recognize these natural landforms and the historical design tradition that seeks to enhance and highlight naturally occurring features. To this end, plantings will be used to add seasonal color, edge treatments, and to help form vistas and views within the park. The plan also addresses landscape issues from the perspective of vegetative communities, public use and safety as well as ease and effectiveness of overall maintenance of the park.

#### SUMMARY OF EXISTING CONDITIONS

Carondelet Park's landscape is not diverse. The predominant ground-cover is grass with no diversity of low-level plantings and there is currently little to no understory. The tree canopy is made up of two primary vegetative communities – one being a predominantly mature white oak/hickory tree area and the second being a predominantly non-native tree area. In terms of the tree canopy condition, there is an area of high quality and an area of significant decline. These two tree canopy conditions make up less than fifty percent of the park. The remaining trees in the park are of average quality and condition. Small and fragmented areas of quality habitat are located in a few key areas of the park around some of the sinkholes and along the bluff line leading into the lowland of the rail line corridor.

Most of the current tree planting occurs in an ad hoc manner with no coordinated landscape plan to guide tree placement. Some of the plantings, like the saplings planted across Loughborough Drive from the Boathouse, were planted in one area and contributed to the current problem of monoculture in the park and did not respect current use of the area. Generally, the park is void of ornamental trees, shrubs, and diverse ground cover plantings that are necessary to provide healthy and diverse plant communities and aesthetic variety.



## DESIGN RECOMMENDATIONS

### OBJECTIVE:

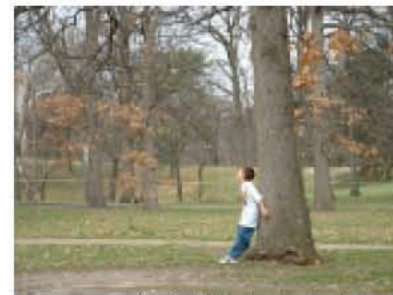
Create a scenic and picturesque park that includes a diversity of landscape types including forested areas, savannahs, wetlands and open parkland.

### GENERAL RECOMMENDATIONS:

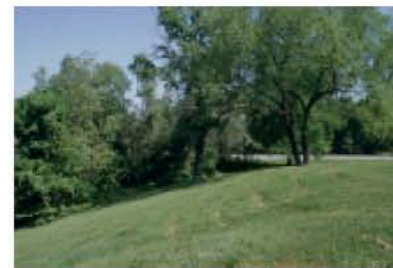
- Expand the existing forested area to include the area surrounding the Holly Hills and Livingston wetlands; the Loughborough wetlands; and along Grand Drive and the rail corridor.
- Develop savannahs throughout the park but particularly around Horseshoe Lake and between Loughborough Drive and Loughborough Boulevard.
- Intermingle wetland and savannah landscape types in the southern Loughborough wetlands area between the Boathouse and Lyle House.
- Develop a native flowering meadow on the slopes surrounding the Bear Pit to reduce erosion, reduce drainage into the Bear Pit, and to direct pedestrian access to the Bear Pit.
- Maintain open parkland with turf near the Holly Hills picnic pavilion, the picnic area around the Bear Pit, the Loughborough playground, Horseshoe and Boathouse Lakes, the Lyle House, the Old Stable Building and generally along the edges of the park.
- Introduce native plantings on all the slopes that are too steep to mow and particularly around the edges of Horseshoe Lake and Boathouse Lake and the sinkholes in order to lessen erosion and run-off.
- Restrict the visual axis on Loughborough Drive through the use of dense landscaping so that the space opens up to the new Horseshoe Ponds at the new bridge.



Aerial looking south



Playing hide-and-seek under the trees

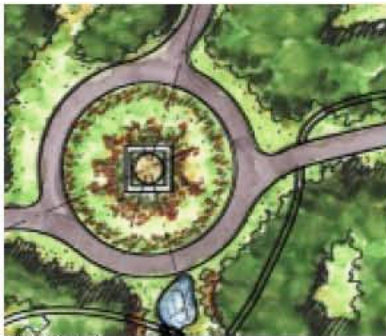


Steep grassy slope



Landscape





Central Circle



Trees along the edge of Horseshoe Lake



Example of fall color display

- Densify the landscaping surrounding the three vehicular roads and paths approaching the Boathouse in order to open up and dramatize the formal Boathouse space.
- Densify the landscaping surrounding the routes approaching the Lyle House and the Old Stable area in order to highlight the space and its connection to adjacent wetlands.
- Remove overgrowth in sinkhole areas to express the form of the land and restore natural wetlands and habitats.
- Clear overgrowth from the bridges and around structures.
- Open views in the landscape to all the new wetlands areas.
- Consider the use of formal planting beds around the Boathouse.
- Utilize the central circle on Loughborough Drive as a grand visual display for plantings and public art.
- Create an informal garden of flowering native plants between the Old Stable building and Lyle House.
- Landscape triangular traffic islands.

#### VEGETATIVE COMMUNITIES:

- Design the plant communities with the approach of determining what plants existed naturally on the site, select the desirable plant species, prepare the site for rehabilitation, and then re-plant. This approach is most flexible for any height, level or size plant and reduces maintenance costs and susceptibility to disease.

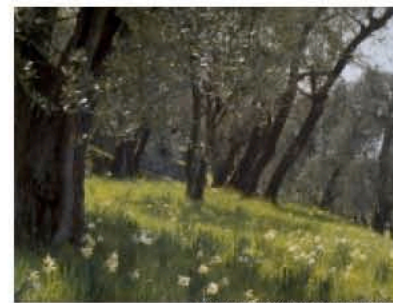


Loughborough Drive south of Central Circle

- Emphasize the use of native species of vegetation and reduce monoculture in order to reduce the need for fertilizers.
- Use a vegetative communities design approach which:
  - Emphasizes planting of native vegetation.
  - Utilizes trees and shrubs that enhance the fall color display.
  - Utilizes trees and shrubs that highlight spring flower display.
  - Uses trees, shrubs, and herbaceous species that have a high aesthetic appeal (i.e. decorative foliage).
  - Avoids plant species that are characteristically aggressive.
  - Increases the park's biodiversity to reduce the chances of natural catastrophes caused by insects and diseases.
  - Increases wildlife habitat for aesthetically pleasing species such as songbirds and butterflies.
  - Increases the vitality for the park's evergreen tree component- primarily coniferous trees.
  - Select plant species that will stabilize steep banks and reduce soil erosion.
- Use plantings that are typical of a particular site's topographic character, soil and geographic qualities, drainage, slope orientation, light/shade requirements, wind and element tolerance.
- Establish trees and shrubs of similar species and varying sizes in arrangements or communities over large geographic areas to achieve a naturalistic character and ensure future age and size diversity.
- Link numerous groups of mature native tree canopies to create a compact woodlands corridor with many layers of vegetation, including extensive understory flowers in early spring.



Formal landscaping at the Boathouse



Example of flowering meadow



Vegetative Communities





Example of woodlands corridor



Example of potential wildlife



Planted flowering bed near the Lyle House

- Relocate plantings at a young age, whenever possible and dictated by land use decisions, to improve the survival rate of these trees and reduce the need to provide new plantings elsewhere.
- Prune and maintain mature trees and saplings in order to prolong their life span.
- Remove overgrowth and invasive species.
- Ensure that steeply sloped areas are planted with trees, shrubs, and ground cover/perennials to reduce foot traffic, resulting in soil erosion, and the need to mow while providing dramatic seasonal vegetative displays.

#### WILDLIFE HABITAT:

- Create a wildlife corridor linking the Horseshoe Lake area with the former Glaze Creek area. Concentrate on restoring natural habitats along the corridor and in particular the forested areas in the north and central portion of the park.
- Diversify the habitat, spatial quality and plant variety of the corridor by incorporating the wetlands into this dense corridor.
- Create specific vegetative communities throughout the park to provide seasonal habitat, cover and food for desired park wildlife and furnish vegetated links or corridors between the communities.



Livingston and Holly Hills Boulevard entrance

- Implement measures to control terrestrial, aerial and aquatic nuisance wildlife.
- Maintain some dead trees and down dead wood to provide wildlife habitat, while taking into account the issue of public safety and landscape context when determining the location.
- Rebuild tree density while decreasing density in geographical low-land areas of specific programmatic intent.
- Implement selected thinning of existing tree species and increase biodiversity by planting other native tree species.



Existing trees near the Music Pavilion

- PUBLIC USE & SAFETY:**
- Use plant material in a way that will not adversely affect park functions.
  - Situate armed, thorned or mildly toxic plantings away from high use public areas where they can be viewed but not easily accessed.
  - Choose and arrange plantings to minimize areas for hiding in order to discourage criminal activity.
    - Situate densely planted areas away from paths and seating areas.
    - Discourage planting of densely planted shrubs and use multi-stem "clump" varieties of ornamental trees to create a naturalistic wooded effect rather than visually impenetrable vegetation groups.
    - Consider pathway lighting in subtle forms that light naturalistic areas.



Densely planted woodland edge



Tree Canopy



## DESIGN RECOMMENDATIONS

### UNPROGRAMMED PASSIVE RECREATION

#### OVERVIEW



Boating on Boathouse Lake 1900s



Fishing from the edge of Boathouse Lake



Loughborough Playground



Summer Concert Series at the Music Stand

Passive open space is defined as the non-programmed use areas throughout the park where one can picnic, view nature, stroll through a meadow or fly a kite. The western side of the park is primarily passive in use with only a few active areas. The area east of Glaize Creek is the main area of active recreation.

Carondelet Park's passive system has the potential to include a great variety of landscape types including forested areas, savannahs, open meadows and lawns. There are different levels of usage within the passive open space system of the park. The existing picnic areas, the edges of Horseshoe Lake and Boathouse Lake and the playground near Loughborough Avenue are the primary areas with high usage. However, the majority of the park is underutilized and falls in the moderate to low category of use.

#### SUMMARY OF EXISTING CONDITIONS

The majority of the park is orientated towards passive recreation. However, there are few amenities to support the passive use of the park and many of the existing amenities are in places that do not correspond to areas of high passive use or are not well maintained. Generally, the picnic pavilions and tables are underutilized with some picnic facilities in poor locations such as the one near the current recycling and mulch area, other examples include the picnic tables located in a wooded area along Loughborough that have no access to a path or other amenities and a water fountain that is not adjacent to any paths, buildings or active recreation areas. In addition, picnic tables and pavilions are not adjacent to key facilities like the playground or the lakes.

The existing Bear Pit is not only underutilized but is over grown and not well maintained and as such is a major problem area in the park. Similarly, many of the sinkhole areas and the area of Glaize Creek are poorly maintained and not visually appealing as well as being perceived as problem areas in the park. If all these conditions were to be improved and the variety of landscapes types included, as suggested by the community, there would be a multitude of sites for year-round outdoor activities as well as opening up opportunities for new and diverse outdoor experiences and events.



## DESIGN RECOMMENDATIONS

### OBJECTIVE

Increase the quantity and quality of amenities in support of passive recreation throughout the park and to provide one unique adventure playground at the Bear Pit. In particular, add new picnic pavilions and tables, benches, water fountains, and trash bins throughout the park. All amenities to be located in support of the key water and landscape features, security and maintenance requirements, and ADA access requirements.

### GENERAL RECOMMENDATIONS:

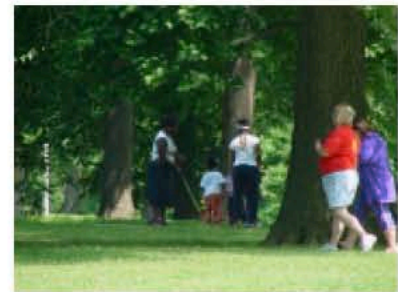
- Add amenities such as benches, water fountains, and trash bins throughout the park. The exact locations are to be determined on site and in discussion with the community but generally should be in support of the path system, the picnic facilities and the key water and landscape features.
- Remove the existing Holly Hills playground and install a new picnic pavilion.
- Remove the existing picnic pavilion and restrooms near the recycling area.
- Consider including chess and checkers tables near a few of the picnic facilities.
- Add picnic tables on the northwestern edge of Horseshoe Lake and near the multi-purpose White Wall Ball Fields
- Upgrade the area around the Music Stand as a major concert venue and add picnic tables. Remove all the overhead cables while still providing the necessary electrical power for concerts.



Existing picnic pavilion



Easter Egg Hunt in the park



People enjoying the shade during the summer



Unprogrammed Passive Recreation



Existing picnic table in the park



People picnicking on the grass



Bench and fishing platform

- Upgrade the site conditions (paving, barbeque pits, etc.) around the Music Pavilion. Open the landscape to create a vista from the pavilion to the Bear Pit.
- New picnic pavilions should be of a unique design that either builds upon the architectural tradition of the existing Music Stand and Pavilions or the stone restrooms.
- Remove existing restrooms adjacent to tennis court. New restrooms, water fountains, etc. to be included in renovation of Old Stable Building and site.
- Add two new picnic pavilions near the Loughborough Playground area. Locate pavilions to overlook the Horseshoe Ponds and Riffles.
- Upgrade and maintain all existing picnic sites to a high standard.
- All amenities and improvements to the park must meet all federal, state and local code requirements.



Adventure Playground and surrounding amenities



SITE SPECIFIC RECOMMENDATIONS:  
THE BEAR PIT

The Bear Pit will be developed as a new adventure playground encircled by two new picnic pavilions and three existing pavilions. In order to ensure visual access to the Bear Pit at all times, the upper wall of the Bear Pit will be removed but the quarry rocks will remain and the surrounding area will be landscaped with low meadow type plantings.

- Open up the area around the bear pit in order to create a safe, well lit, and highly used destination.
- Design the adventure playground using the theme of "bears" acknowledging the local history and folklore of the area.
- Upgrade the existing picnic facilities around the Bear Pit.
- Provide two new picnic facilities that are unique in character.
- Remove overgrown shrub growth and adjacent tree density on the steep slopes surrounding the Bear Pit and landscape the steep slopes with low native meadow grasses and flowers to prevent soil erosion and access down to the Bear Pit.
- Remove the upper wall of the Bear Pit but preserve the quarry rocks as the edge of the adventure playground.
- Create an adventure playground using naturalized materials in and around the Bear Pit. Adventure playground to be designed to meet all required safety standards and ADA requirements
- Use layers of aggregate and a French drainage system to ensure proper drainage of the Bear Pit area.
- Retain existing access road for police and security patrols. Change material of access road to match the pedestrian pathway system.
- Provide ornamental and feature lighting in the Bear Pit area.



Aerial of proposed Bear Pit development



Bear Pit upper wall and quarry rock



Upper wall of Bear Pit



Bear Pit before



Bear Pit with upper wall removed

## DESIGN RECOMMENDATIONS

### ACTIVE SPACE



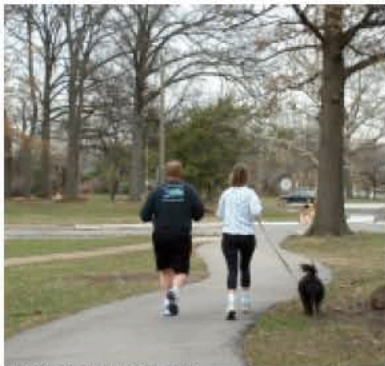
Soccer game 1922



Playing tennis



Spectators at White Wall Field



Joggers on the existing path

#### OVERVIEW

A small portion of Carondelet Park is dedicated to active recreation. Besides the White Wall Field the primary location of active recreation is the eastern end of the park between the railroad tracks and the Interstate. The amount of space dedicated to active recreation appears to be appropriate for the needs of the current population of park users. However, the amenities in the eastern section could be improved in layout, quality and maintenance. The critical active recreation need in Carondelet Park is a comprehensive and integrated path system for biking, jogging and walking. Thus, the plan proposes a path system that connects all the major amenities within the park to the adjacent neighborhoods and facilities.

#### SUMMARY OF EXISTING CONDITIONS

The park's active recreational programming is devoted primarily to spring, summer and fall activities. No programming or support facilities for winter active recreation currently exists. The park's athletic facilities are not necessarily programmed or maintained at the highest levels. The ball fields have little to no spectator seating areas and are in poor physical condition. The current fields are not designed with operational flexibility, environmental quality, participant and viewer comfort/convenience and aesthetic character in mind. Backstops and dirt infields break up the visual and environmental continuity. The fields are not oriented to utilize existing shaded or sloped areas for viewing. There are also very few areas of unprogrammed active recreation space in the park where a user can gain access to a field for the day on a first come first serve basis without a permit. Fields are permitted for use at different times of the day and evening however, many of the fields go unused even after a permit has been obtained.

Carondelet Park's path system is currently inadequate for the potential uses within the park. It does not make a full safe connected circuit within or surrounding the park. Many areas of the existing paths have slopes that are too steep such as, along the Leona edge of the park and the area connecting across the Holly Hills Bridge and down to the ball fields. Other areas of the path flood, including along the Leona and Loughborough edges of the park. There are areas with duplicative paths such as the area from Grand Drive across from the stables down to Loughborough Avenue and between the Music Pavilion and picnic areas along Grand Drive.



## DESIGN RECOMMENDATIONS

### OBJECTIVE

Improve the existing active recreational amenities in the park by upgrading the existing White Wall Ball Fields and the fields in the eastern recreational zone. Consider the option of building a new Community Center to anchor the eastern recreational zone. The existing multi-use path will be extended and connected to form a loop system throughout the park. An external sidewalk will be developed along Holly Hills Boulevard, Leona Street and Loughborough Avenue (see Access, Circulation and Parking section). Internal park trails will be added to connect to the neighborhoods, the external sidewalk, key park features and the multi-use path.

### GENERAL RECOMMENDATIONS:

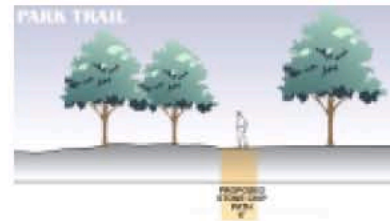
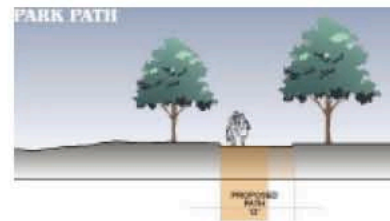
- Post permit information at all athletic fields to clarify assignments and allow for casual non-permit use of open fields.
- The White Wall regulation softball field and children's soccer field will be upgraded and reoriented. Allow for unstructured active and passive recreation of this area.
- Maintain existing horseshoe pits.
- Maintain existing tennis courts and improve the surrounding amenities such as benches, a water fountain and signage.
- The internal multi-use-loop path and trail system should link to all major amenities within the park.
- Create a connected 12' wide internal multi-use-loop path system. This path will serve walkers, joggers, bikers and roller-bladers.
- Create a park trail system 6' wide that meanders throughout the park connecting key amenities, passive and active spaces. Design this path using stone chip or recycled materials. This path system will be for walkers and joggers.
- Provide additional path amenities along the path system including water fountains and benches.



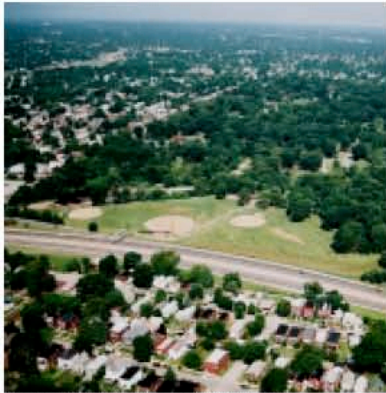
Bench adjacent to existing path



Multi-use-loop path



Active Space



Aerial of proposed eastern recreation area



Option A

#### SITE SPECIFIC RECOMMENDATIONS: THE EASTERN RECREATIONAL AREA

Two options for the redevelopment of the eastern recreational area have been developed dependent upon if a community center is built within Carondelet Park.

#### OPTION A: EASTERN RECREATIONAL AREA WITHOUT THE COMMUNITY CENTER

An Active Recreation Zone will be developed with shared parking and amenities. The existing athletic fields will be upgraded.

Key recommendations are as follows:

- Create a high quality, recreational area at the eastern end of the park.
- Upgrade athletic fields to include one regulation baseball field, one regulation softball field, one regulation soccer field and one children's soccer field.
- Develop one new regulation softball field and one children's soccer field near Holly Hills Boulevard. Provide new restroom facilities and a drinking fountain.
- Renovate the existing field house, surrounding area and amenities.
- Increase parking around the Field House to support recreational activities at peak times.
- Renovate existing adventure education site.
- Create a visual and sound barrier with vegetation and embankments along the highway on the eastern edge of the park.
- Consider diversifying the active recreational programming in the park to include other recreational sports.

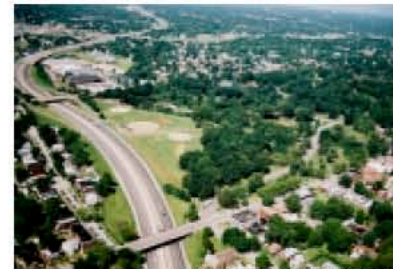
#### OPTION B: EASTERN RECREATIONAL AREA WITH THE COMMUNITY CENTER

An Active Recreation Zone will be developed and anchored by a new Community Center in the location of the current field house with shared parking and amenities. The building would be integrated into the landscape with a two-story facility looking out onto the fields. The new Community Center will provide the existing athletic fields with the necessary locker rooms and facilities. Key recommendations are as follows:

- Create a high quality, recreational area at the eastern end of the park.
- Upgrade and re-position athletic fields to include one regulation baseball field, one regulation softball field, one regulation soccer field and one children's soccer field.
- Develop one new regulation softball field and one children's soccer field near Holly Hills Boulevard. Provide new restroom facilities and a drinking fountain.



- Increase parking adjacent to the new Community Center to support recreational activities at peak times.
- Renovate existing adventure education site.
- Create a visual and sound barrier with vegetation and embankments along the highway on the eastern edge of the park and the railway line on the western edge of the recreational zone.
- Consider diversifying the active recreational programming in the park to include other recreational sports.
- The community has determined key requirements for the new community center building and its location. The structure of the building should be two stories with the lower level built into the slope of the landscape. One story will be visible from the eastern end of the park with two stories visible to the ball fields. The pool, basketball court, locker rooms and other athletic facilities should be located on the lower level with access to the outdoor fields. The main entry, community rooms and facilities should be located on the upper level with a double height atrium space at the center. The parking for the facility should be developed with the understanding that on-street parking will also be available throughout the park. The ball fields should be reoriented for the best possible site location in connection to the new community center building.
- The assumption for the Community Center is that the building occupies an approximately one acre footprint with a 75,000 square foot two story facility and there is a parking lot of approximately 225 spaces.



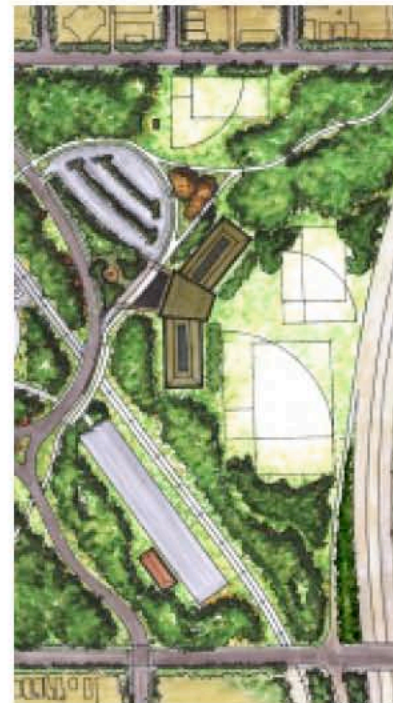
Aerial of eastern recreation area



Existing ball fields



Proposed schematic Community Center sections



Option B

## DESIGN RECOMMENDATIONS

### FACILITIES



Carondelet Boathouse, 1927



Carondelet Boathouse



Lyle House



Music Pavilion

#### OVERVIEW

Carondelet Park has a small number of existing park facilities that add to the unique character of the park. The Master Plan acknowledges the value of these amenities and seeks to maintain and enhance the existing structures. Many of the facilities are underutilized and there needs to be a more detailed study for the reuse of the key facilities. From an architectural perspective, the prime objective is to maintain the distinctive character, quality of construction and individual architectural integrity of each building and structure in Carondelet Park. A strong overall image of the park is developed through the sense of scale, richness of detail and quality of construction in these primary park facilities. Design and maintenance standards should be developed to maintain and enhance the existing facilities.

#### SUMMARY OF EXISTING CONDITIONS

Carondelet Park has a number of significant historic buildings and buildings of architectural merit that have contained a variety of uses over the years. There is no predominant architectural "theme" in the park. The facilities vary from the Lyle House built in 1850 in the Greek Revival style to the WPA comfort stations to the contemporary rustic picnic pavilions and modernist restrooms. Most of the structures are in good condition with three of the comfort stations in fair to poor condition. Few of the facilities are currently ADA accessible, a situation that must be addressed as changes and improvements are made. The existing maintenance facility is outdated and inadequate. There are currently no park-wide guidelines for maintenance of these facilities.

Site furnishings in Carondelet Park also suffer from inadequate maintenance and the lack of a comprehensive placement plan. There are very few park benches or seating areas within the park. There is currently no pedestrian scale lighting in the park and cobra head street fixtures are predominant. However, as part of ongoing parks improvements, the drinking fountains have all been replaced with ADA fountains in the past year.

The condition of infrastructure in Carondelet Park varies greatly. The road system is currently being replaced and renovated throughout the park. Approximately 85% of the roadways will be replaced before the end of 2003. The bridges are in serious disrepair with the Holly Hills Drive bridge roadway in the worst condition. The majority of existing utilities are also in differing states of condition. The water lines along the western edge of the park were recently replaced. Catch basins along the roadways are being replaced during roadway reconstruction and the electrical infrastructure condition is unknown at this point in time.



## DESIGN RECOMMENDATIONS

### OBJECTIVE

Maintain the existing facilities that are used in good order; renovate and reprogram those facilities that are under-utilized; remove those facilities that are not required; and provide a new maintenance facility that meets the current needs. The new parks maintenance facilities will be located in the former mulch storage area and as a result, the Old Stable building and loft space will be renovated for community uses with public restrooms and a catering kitchen. The existing vacant boathouse will be renovated with lower level restrooms, concession area and a catering kitchen, and the upper level renovated as a special events and rental pavilion. The Music Stand and adjacent pavilion will be upgraded for continued use as a concert venue. Entrance gates and public art will be added as appropriate within the park. All existing picnic pavilions and restrooms are to be maintained to a high standard.

### GENERAL RECOMMENDATIONS:

- Conduct a more detailed study on a number of key facilities to ensure the economic viability of all the proposals.
- Renovate the Old Stable building (1893) and loft space as a community venue. The renovation should maintain the exterior character of the Arts and Crafts style. Provide a drop-off and additional parking in the area including an outdoor plaza and an open green space for special events with an area for a special events tent. Provide public restrooms in the Old Stable building. Design to be coordinated with the outdoor improvements around the Lyle House.
- Renovate the Lyle House (1850) maintaining the exterior in Greek Revival character. Over-time consider additional programming.



Grand Avenue Bridge



Existing comfort station



Field House



Facilities



Boathouse



Holly Hills Bridge



Old Stable Building with outdoor plaza

- Renovate the Boat House (1918) with the lower level as restrooms, concession area and a catering kitchen, and the upper level as a special events and rental pavilion. Details and colors from the Italian Renaissance Revival style should be incorporated into the renovation design.
- Upgrade the Music Stand (1898) and the adjacent pavilion for continued use as a concert venue and for other community events. This would include making the area ADA accessible and removing the overhead electrical cables while still providing the necessary electrical power. Original details and colors from Italian Renaissance Revival style should be incorporated into the renovation design.
- Renovate, update and make ADA accessible the restroom facility west of Horseshoe Lake Footbridge.
- Renovate, update and make ADA accessible the restroom facility north of the Loughborough playground.
- Maintain the recently renovated restroom near the ball fields if the community center is not built.
- Maintain the Music Pavilion (1898) in its original Folk Victorian style. Upgrade the site area with new paving and a barbeque area.
- Provide a new restroom facility adjacent to the new athletic fields along Holly Hills Boulevard.
- Repair the Horseshoe Lake Footbridge (1939) in the Rustic style and use it as a major connection in the park trail system.
- Repair the old Kansas Bridge, now called the Holly Hills Bridge, and convert it into a pedestrian bridge and bike path crossing within the park path system.
- Repair the Grand Avenue Bridge.
- Maintain the White Wall retaining wall in a rustic style.
- Relocate the maintenance facility and parking from the current Old Stable building to the existing mulch area. Create additional parking for Parks Department employees and maintenance vehicle storage.
- Remove restroom buildings from the recycling area and tennis court area. New restrooms in the renovated Old Stable building would replace the ones removed near the tennis courts.
- Remove the existing picnic pavilion from the recycling area.
- Add two new pavilions around the bear pit area.
- Remove the small Holly Hills playground and provide a new picnic pavilion.
- Add exterior accent architectural lighting at the Lyle House, Old Stable Building, Boathouse, Horseshoe bridge and additional structures as desired.
- Provide safety lighting at all restrooms and pavilions



- Add water lines at new pools east of Horseshoe Lake and to the Holly Hills Wetlands and Loughborough Wetlands.
- Add electric and water lines at mulch and recycling area for the new maintenance building.



Old Stable Building after



Old Stable Building



Old Stable Building before



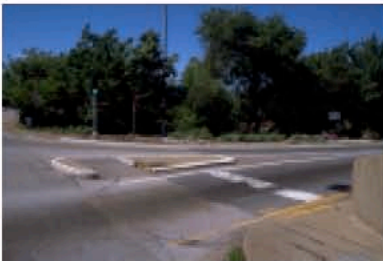
Maintenance Facility, Old Stable Building and the Lyle House

## DEVELOPMENT RECOMMENDATIONS

### ACCESS, CIRCULATION, & PARKING



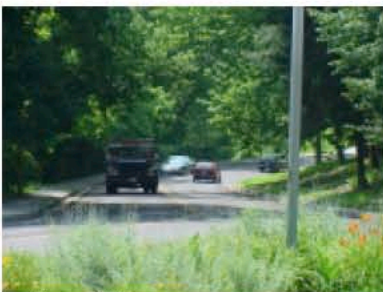
Standing between the Carondelet Park gates 1917



Loughborough Drive entry



Grand Drive Circle in front of the Lyle House



Loughborough Drive

#### OVERVIEW

It is essential that the park maintain a defined, ordered and comprehensive vehicle and pedestrian access system such that way-finding and general orientation within the park is clear and understandable for all users of and visitors to the park. Design of the park's paths and roads has focused on ensuring that only those roads which are functional and necessary remain, and that any road or path be designed and maintained to blend into the surrounding landscape, causing the least visual and physical disruption as possible. Reduction of the quantity and speed of the commuter traffic through the park is also a priority. The plan also recognizes the need to provide adequate parking for special events.

#### SUMMARY OF EXISTING CONDITIONS

The current configuration of the roadway system in Carondelet Park has been in existence since the early 1900's. No new roads have been added since the entrance from Holly Hills Boulevard at Livingston in 1928. A few service roads along the western edge of Boathouse Lake and in the recycling area have been expanded over the years. The roads are typically well-designed being approximately thirty-five feet wide, well drained and sympathetically integrated into the landscape. A general problem throughout the park is the number and location of pedestrian crossings of both the internal and external road system. There is a need to clarify and mark the pedestrian crossings to ensure a high safety standard is achieved.

Overall, the road system is adequate for the needs of the park although commuter traffic is a problem with the connection from Grand Avenue through the park to Loughborough Boulevard. Loughborough Boulevard provides direct access to Interstate 55 on and off ramps, which is a major connection to the city and the region. Associated with this commuter route through the park are the dangerous traffic intersections and problem pedestrian crossings. Holly Hills Drive, east of Grand Drive, within the park seems to be duplicative of the adjacent Holly Hills Boulevard.

The park has adequate on-street parking to serve the parking needs on a daily basis. Even for special events such as the Concert in the Park series, the walking distance for parking is well within typical standards. The one exception being the parking adjacent to the ball fields on the eastern edge of the park which is inadequate for major sporting events.



## DESIGN RECOMMENDATIONS

### OBJECTIVE

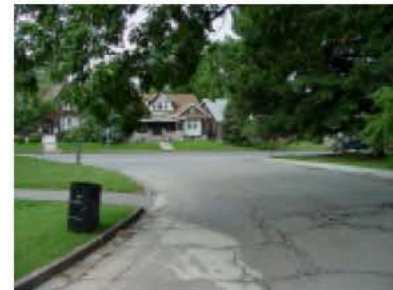
Create an internal one-way street system within the park to improve the safety, function and efficiency of the roadway, develop a continuous pedestrian path system, and provide an increased amount of parking. In addition, there has been a long-standing objective to functionally connect the eastern and western sections of the park. This is achieved by creating a new one-way "Grand Drive Loop" road and bridge that connects the eastern and western sides of the park over the railroad tracks with both a road and dedicated pedestrian and bike path. This idea is supported by the creation of an external sidewalk system around the entire edge of the park.

### GENERAL RECOMMENDATIONS:

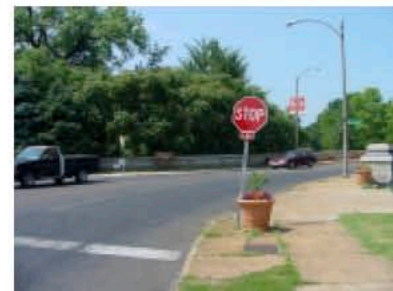
- Develop a one-way road system throughout the park that will direct vehicles west along Holly Hills Drive and east along Loughborough Drive in order to improve the safety, function and flow of the traffic and allow for a parking lane on each side of the road. The cross streets will also be one-way with Lake Drive flowing from south to north and the Circle Drive extension from north to south. All the park entrances remain as two-way entrances / exits to the park with the exception of the Grand Drive entrance at Holly Hills Boulevard.
- Create a new one-way "Grand Drive Loop" by constructing a new road to the east of the railroad tracks and west of the active recreational zone. The new road will intersect the existing Grand Drive near the Lyle House at its southern end and create a new exit from the park at Grand Boulevard and Holy Hills Boulevard in the north.
- Provide a new bridge over the railway tracks for the Grand Drive Loop.



Event parking on Loughborough Drive



Southwest corner entrance



Grand Avenue bridge



Park Road System



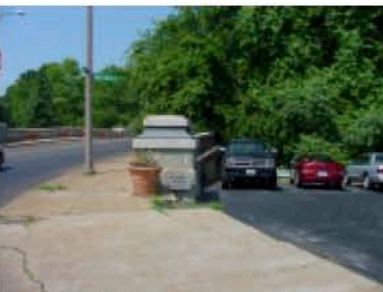
Holly Hills Drive



Grand Avenue Bridge



Intersection at the northwest corner of the park



Grand Avenue Bridge

- Remove Holly Hills Drive east of Grand Avenue for the development of an active recreation zone that includes a multi-use path and new active recreation fields.
- Utilize the existing steel Holly Hills Bridge over the railway as a pedestrian and bike path crossing.
- Retain the existing service road to the recycling area and new maintenance facility as a two-way loop road.
- Modify the northern entrance from Livingston Drive to accommodate a one-way system by adding the necessary turning radius.
- Redesign the intersection of Loughborough Drive and Loughborough Avenue to align with the entrance of the Schnuck's parking lot and allow for all turning movements and dedicated pedestrian crossings.
- Increase parking near the ball fields and field house to accommodate the necessary facilities by adding a half-circle parking area.
- Add a one-way drop-off and parking at the Old Stable building for special events.
- Locate on-street parking along both sides of the one-way park roadways in accordance with commonly accepted park traffic and transportation design standards.
- All parking lots to be well landscaped and should be paved with a porous surface.
- Provide new stop sign controlled intersections at Holly Hills Boulevard and Livingston; and Loughborough Avenue and Field Street.
- Create a new pedestrian entrance to the park along Loughborough Avenue at Field Avenue with entrance gates and a pedestrian and bike crossing.
- Create an on-street and demarcated bike path connection along Field Avenue from the River Des Peres Greenway to the path system in the park.
- Create a pedestrian entrance at Holly Hills Boulevard and Livingston Drive and connect it to the park trail system.
- Add a pedestrian entrance into the park from Leona at Alma Street. Remove the existing entrance at Haven Street.
- Create two pedestrian routes to the park across the highway bridges on Loughborough and Holly Hills Boulevards.
- Provide a safe and continuous sidewalk system for jogging and walking around the edge of the entire park as well as connecting the internal path system to the adjacent neighborhoods and bike path system.

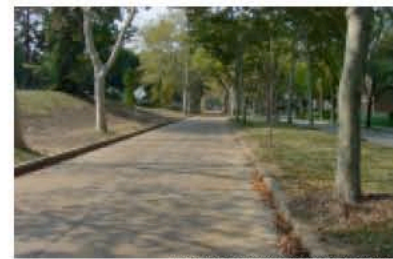


SPECIFIC RECOMMENDATIONS:  
THE EXTERNAL SIDEWALK SYSTEM: LEONA

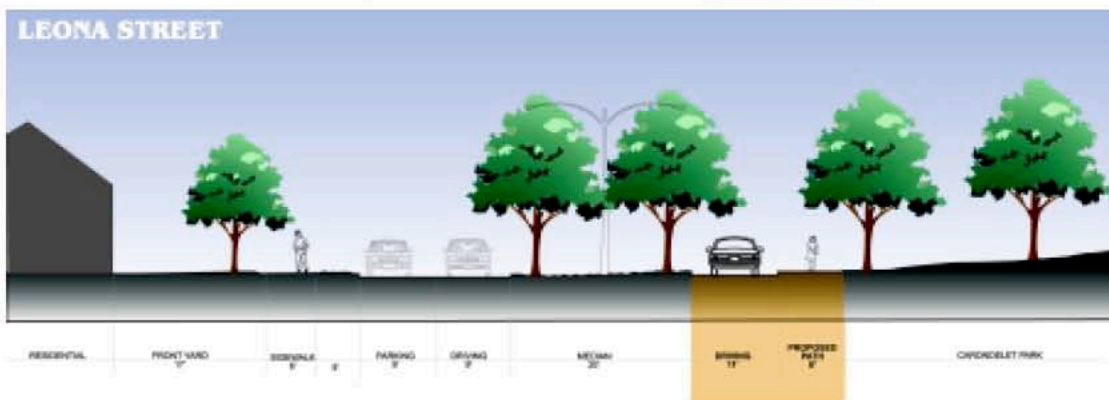
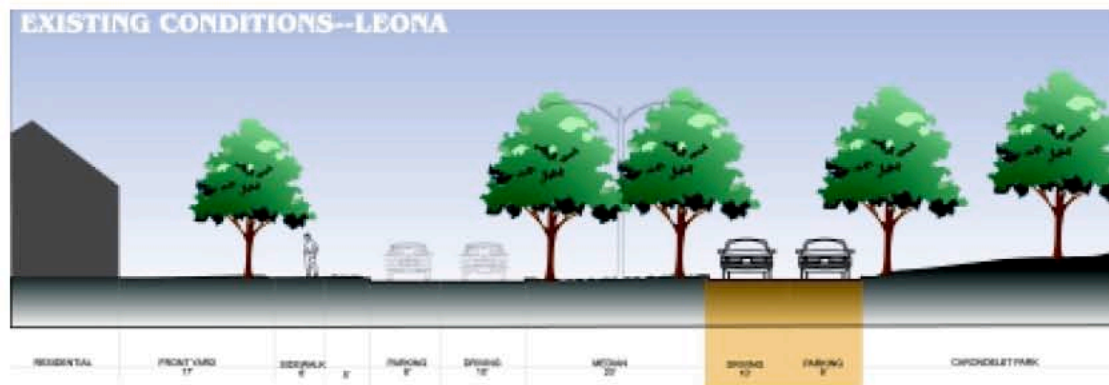
- External sidewalk to be concrete surface and a minimum of eight feet wide.
- Provide an 8' wide sidewalk adjacent to the northbound lanes of Leona Street. The sidewalk will replace the existing parking lane along the western edge of the park.



Median on Leona Street



Existing condition of Leona Street





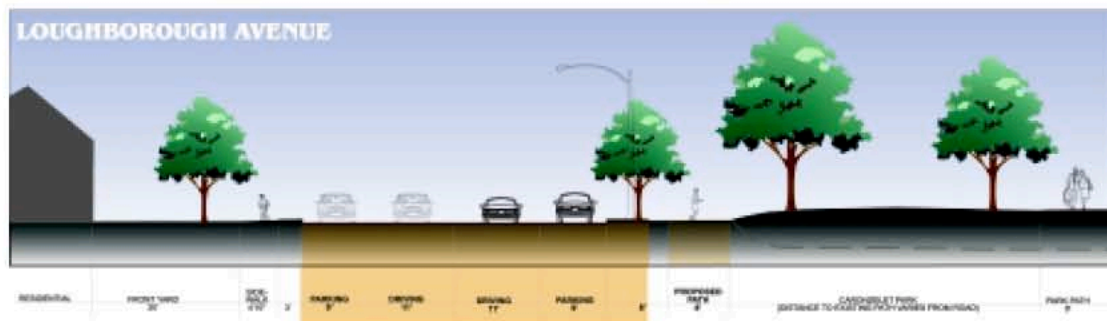
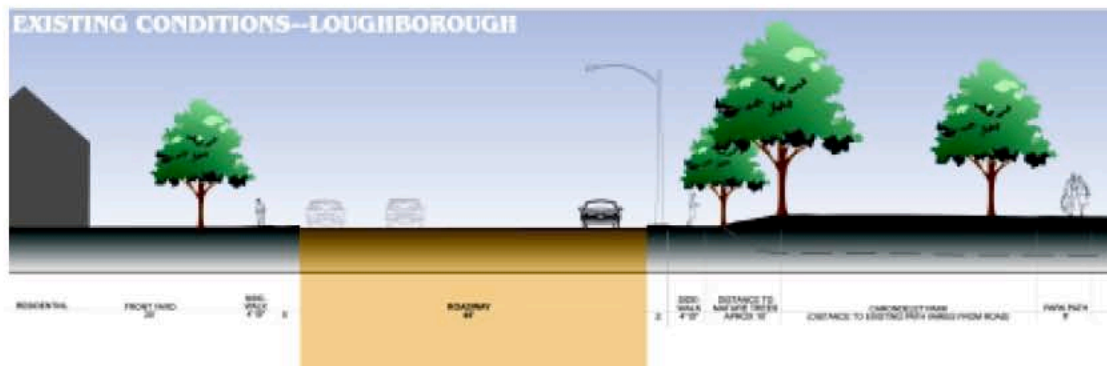
Existing sidewalk along Loughborough Boulevard

#### SPECIFIC RECOMMENDATIONS: THE EXTERNAL SIDEWALK SYSTEM: LOUGHBOROUGH

- External sidewalk to be concrete surface and a minimum of eight feet wide.
- Provide an 8' wide sidewalk adjacent to the westbound lanes of Loughborough Boulevard. The sidewalk will be buffered from the street with a new 8' wide tree lawn. Loughborough Boulevard will continue to have one lane of traffic and one parking lane in each direction however, the traffic lanes will be decreased in width to the existing city standard.



Existing condition of Loughborough Boulevard



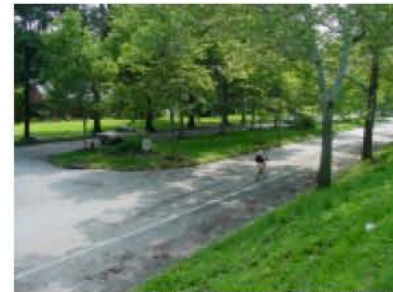
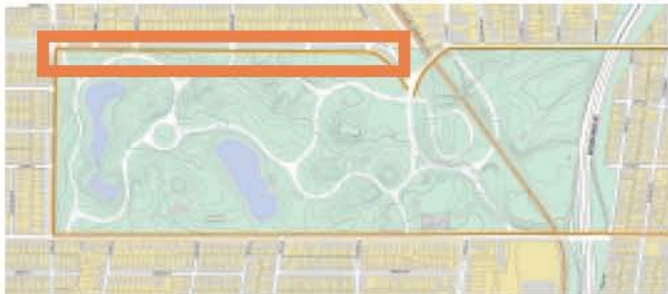


SPECIFIC RECOMMENDATIONS:  
THE EXTERNAL SIDEWALK SYSTEM: HOLLY HILLS

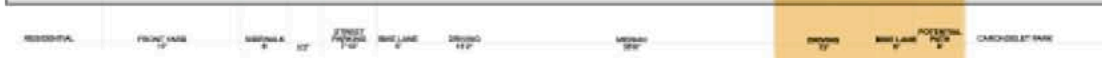
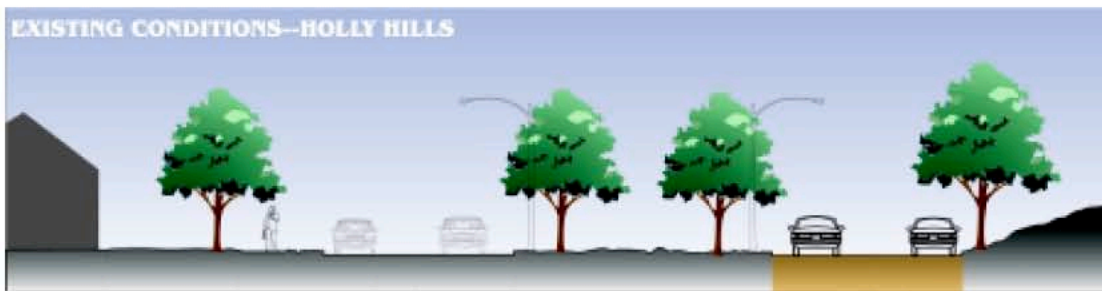
- External sidewalk to be concrete surface and a minimum of eight feet wide.
- Provide an 8' wide sidewalk adjacent to the eastbound lanes of Holly Hills Boulevard. The sidewalk will replace the existing parking lane and will be separated from the traffic lane by the existing striped bicycle lane.



Median on Holly Hills Boulevard



Bike lane along Holly Hills Boulevard



## IMPLEMENTATION STRATEGY

### IMPLEMENTATION OF THE PLAN

#### OVERVIEW

The Department of Parks, Recreation and Forestry currently administers, operates and maintains Carondelet Park through its Parks Division as part of the overall City of St. Louis park system. During the planning process, the need for interested individuals and groups to be involved in the ongoing implementation of this Plan became clear. To ensure this ongoing participation, the Master Plan calls for the establishment of a Carondelet Park Implementation Advisory Committee. The objective of this committee is to monitor and review projects to determine compliance with the Master Plan. The Committee cannot revise the plan, but can submit recommendations for revisions to the Director of Parks, Recreation and Forestry. Membership on this Committee, appointment by the Director of Parks, Recreation and Forestry, will include representation of the various interest groups, neighborhood groups, other park users and professionals.

Initial funding sources have been identified through the current allocation of City parks funding. Other sources of funding will need to be identified from private sources and should include donated services. The Master Plan calls for a management and maintenance plan to be developed by the Parks Division as one of the initial implementation tasks. The management and maintenance plan needs to take into account future projects and changes to the park. The first phase of the implementation projects have been identified and general order of magnitude probable costs estimated.

#### RECOMMENDATIONS

##### GOVERNANCE

Develop ongoing citizen involvement in the implementation of the master plan by establishing the Carondelet Park Implementation Advisory Committee whose purpose will be to oversee the implementation of this Master Plan, ensure that the intentions and goals of this master plan are achieved, and keep the public informed on the progress of this plan.



## RESPONSIBILITIES & AUTHORITY OF THE CARONDELET PARK IMPLEMENTATION ADVISORY COMMITTEE:

- Monitor implementation of and compliance with the Master Plan and provide ongoing community input regarding the restoration of Carondelet Park.
- Review significant modifications to the Plan, including those made by tenants, outside agencies and the Parks Department.
- Constitute a part of the public review process for major park projects in addition to the public entities.
- Keep the public informed and advised of matters relating to the Master Plan.
- The Committee is not authorized and shall not have power to amend or change the Master Plan, but may recommend changes to the Master Plan for consideration to the Director of Parks, Recreation and Forestry.
- The Committee shall meet at least once each calendar quarter and give public notice as required by law and as determined necessary by the Committee.

## OPERATING PRINCIPLES

The Implementation Advisory Committee shall meet at least once a quarter, and more often as it deems necessary, to review, discuss and approve proposed projects which are consistent with the goals and principles of the 2003 Carondelet Park Master Plan. The Carondelet Park Implementation Advisory Committee shall establish time frames for review procedures in order to ensure that the project approval process does not unduly slow the implementation of the Master Plan. Projects to be reviewed include major park projects that are both privately financed and publicly financed.

For both publicly and privately funded projects within the Master Plan will be brought to the Committee by the director of Parks, Recreation and Forestry once a donor has been identified and a project prospectus developed. The Committee will review the proposed project at this prospectus stage and provide written comments to the Parks Department. Once a preliminary design has been developed, the committee will again review the project and provide written input. The Committee will have a final opportunity to review and provide written comments on the proposed project at 90% design and submit the project for approval by the director of Parks, Recreation and Forestry. At each step of the process, the Committee may seek public input if deemed necessary.

## CARONDELET PARK IMPLEMENTATION ADVISORY COMMITTEE:

Members to be appointed by the Director of Parks, Recreation and Forestry. The Committee membership should be representative of the following up to a maximum of twenty members:

- Neighborhood Organizations
- Community Service Organizations
- Not-for-Profit Organizations
- Landscape Architect/ Arborist
- Active Recreation Specialist
- Neighborhood Schools

The following members shall serve ex-officio:

- Aldermen of the 11th and 12th Wards
- City Representation
  - Parks Department
  - Board of Aldermen
  - Planning and Urban Design Agency
  - Board of Public Service
  - Neighborhood Stabilization Officers

The term of all ex-officio members shall correspond to their respective official terms. Of the fifteen members appointed by the director of Parks, Recreation and Forestry, three shall be appointed initially for a term of one year, three for a term of two years, four for terms of three years each, and five for terms of four years each. All members thereafter shall be appointed for terms of four years each.

#### FUNDING

Currently funding sources for Carondelet Park include the City's general fund, the City's capital fund and the Metro Parks tax. Funding for operating expenses for Carondelet Park come from City general revenue funds which are allocated on an annual basis. These funds are used to cover such expenses as grounds maintenance, facilities maintenance, tree care, utilities and miscellaneous support services. The City's capital improvement fund currently refurbishes existing grounds and structures in the park. This funding comes from the ½ cent sales tax that was passed by voters in 1993. In 1994, major city parks began receiving 17% of the total sales tax revenues for capital improvements. The Metro Parks tax was passed by voters in 2000 and provides 1/10 of 1% to parks systems in the region.

Examples of Carondelet Park capital improvements since 1994 include curb and sidewalk replacement; roadway reconstruction; replacement of picnic tables; reforestation; renovation of the upper level of the boathouse; resurfacing of the bicycle trail; ADA upgrades to picnic grounds and comfort stations; rebuilding the tennis courts; the Horseshoe Lake Display fountain; painting of Lyle House; new playground equipment and other miscellaneous improvements.

Additional funding for Carondelet Park should be raised through private funding sources, donations and grants.

#### MANAGEMENT & MAINTENANCE

Carondelet Park is currently managed and maintained by the Parks Division of the St. Louis Department of Parks, Recreation and Forestry. It is recommended that the Parks Department undertake to complete a plan for the continued maintenance and management of Carondelet Park that recognizes the projects and changes that will occur in the park as a result of the master plan.



#### IMPLEMENTATION PROJECTS:

The initial task of the Carondelet Park Implementation Advisory Committee needs to focus on moving quickly from planning to implementation in order to capitalize on the strong interest and community participation developed during the planning process. In order to implement the plan, a series of funding partnerships and voluntary programs need to be developed in order to not only leverage the public funds but also to solicit increased participation by the surrounding community in the implementation of the plan. The following tasks need to be completed as soon as possible:

- Appoint the Carondelet Park Implementation Advisory Committee
- Establish Public/Private Funding Partnership(s)
- Develop and Strengthen Volunteer Programs
- Increase Public and Private Funding
- Increase Number of Special Events
- Monitor the Community Center Feasibility Study
- Implement Priority Projects

#### IMPLEMENTATION PROJECTS:

It is recommended that no more than the following list of projects be undertaken during the first phase of implementation. The projects were determined based on the general level of existing funding sources and the potential for volunteer work in the park. The projects are listed in no order of importance or magnitude.

- Bear Pit
- Holly Hills Sinkholes
- Horseshoe Lake
- Maintenance Building and Area
- One-way street system and pedestrian crossings
- Path System (phase one internal system only)
- Reforestation Plan
- Management and Maintenance Plan



Implementation